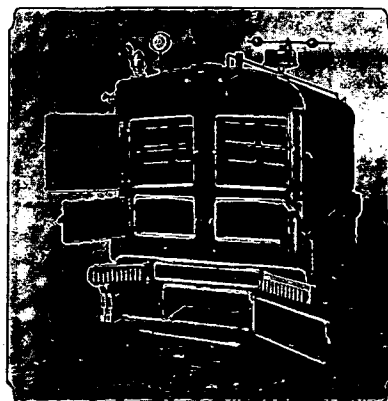


INTERNATIONAL HEATER COMPANY

SECTIONAL MEASUREMENTS
Smokeless Steam Sizes

Series	Height of Water Line, Inches	Diameter of Smoke Outlet, Inches	Height to Supply Outlet, Inches	Add to Height for Trimmings, Inches	Width of Boiler, including Trimmings, Inches	Height from Floor to Center of Return Tappings, Inches	Height of Fire Box to Crown, Inches	Height, Grate to Middle of Feed Door, Inches	Size of Feed Door, Inches
22	47	12	57	11	39	19	22	16	9x17
28	50	14	62 1/2	11	45	19 1/2	24	18	9x17
34	54	16	68	11	54	20	26	18	11x21
47	59	24	73	12	63	21 1/2	26	18	2-10x17

47 in. Series Economy Smokeless Boiler
Showing Access for Cleaning

Ratings and Dimensions ECONOMY SMOKELESS BOILERS † (Steam Pattern)

Number	Guaranteed Radiation Load Sq. Ft.	Commercial Rating Sq. Ft.	Grate Area Sq. Ft.	Additional Area Side Grate, Sq. Ft.	Coal Capacity Pounds	Minimum Chimney Dimensions		Tappings	
						Size of Flue Inches	Height Feet	Supply	Return
60-S-22	837	2200	6.4	3.0	460	12 x 12	35	2-3/4"	2-3/4"
70-S-22	1008	2650	7.3	3.3	545	12 x 12	40	2-3/4"	2-3/4"
80-S-22	1183	3100	8.5	3.7	630	12 x 12	45	3-3/4"	2-3/4"
90-S-22	1354	3550	9.7	4.1	715	12 x 12	45	3-3/4"	2-3/4"
100-S-22	1525	4000	11.0	4.4	800	12 x 16	50	3-3/4"	2-3/4"
60-S-28	1079	2850	8.2	3.3	590	16 x 16	35	2-4"	2-4"
70-S-28	1306	3450	9.3	3.7	705	16 x 16	40	2-4"	2-4"
80-S-28	1533	4050	10.8	4.1	820	16 x 16	40	3-4"	2-4"
90-S-28	1770	4650	12.4	4.4	935	16 x 16	45	3-4"	2-4"
100-S-28	1998	5250	14.0	4.8	1050	16 x 16	50	3-4"	2-4"
70-S-34	1720	4500	11.3	4.0	985	16 x 16	45	3-5"	2-5"
80-S-34	2010	5250	13.2	4.1	1135	16 x 16	45	3-5"	2-5"
90-S-34	2300	6000	15.1	4.7	1285	16 x 16	50	3-5"	2-5"
100-S-34	2600	6750	17.0	5.1	1435	16 x 20	55	3-5"	2-5"
110-S-34	2900	7500	19.0	5.5	1585	20 x 20	55	3-5"	2-5"
120-S-34	3200	8250	21.0	5.9	1735	20 x 20	60	3-5"	2-5"
130-S-34	3510	9000	23.0	6.3	1885	20 x 20	60	3-5"	2-5"
140-S-34	3815	9750	25.0	6.7	2035	20 x 24	60	3-5"	2-5"
150-S-34	4150	10500	27.0	7.1	2185	20 x 24	60	3-5"	2-5"
61-S-47	3300	7950	17.0	5.1	1435	20 x 24	55	2-6"	2-6"
71-S-47	3890	9450	19.5	5.6	1590	20 x 24	55	2-6"	2-6"
81-S-47	4500	10950	22.0	6.0	1740	24 x 24	60	3-6"	2-6"
91-S-47	5100	12450	24.5	6.4	1890	24 x 24	65	3-6"	2-6"
100-S-47	5715	13950	27.0	6.8	2040	24 x 24	70	3-6"	2-6"
110-S-47	6385	15450	29.5	7.2	2190	24 x 28	70	4-6"	2-6"
120-S-47	7075	16950	32.0	7.6	2340	24 x 28	75	4-6"	2-6"
130-S-47	7800	18450	34.5	8.0	2490	24 x 28	80	4-6"	2-6"
140-S-47	8550	19950	37.0	8.4	2640	24 x 28	85	4-6"	2-6"
150-S-47	9300	21450	39.5	8.8	2790	28 x 28	90	4-6"	2-6"
160-S-47	10000	22950	42.0	9.2	2940	28 x 32	95	4-6"	2-6"
170-S-47	10710	24450	44.5	9.6	3090	28 x 32	100	4-6"	2-6"
180-S-47	11425	25950	47.0	10.0	3240	28 x 32	105	4-6"	2-6"
190-S-47	12125	27450	49.5	10.4	3390	32 x 32	110	4-6"	2-6"
200-S-47	12810	28950	52.0	10.8	3540	32 x 32	110	4-6"	2-6"
210-S-47	13500	30450	54.5	11.2	3690	32 x 32	110	4-6"	2-6"

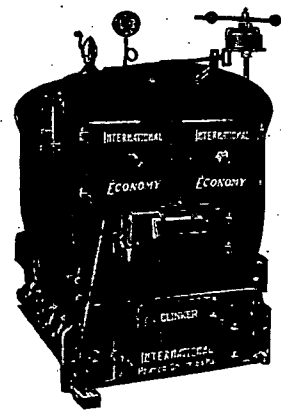
*Judgment should be used in fitting the boiler to a job. As an example: Do not attach a short boiler to a relatively high stack, or a long boiler to a relatively low stack. Suit the boiler to the job.

**All Economy Smokeless Boilers, 22" and 28" series, Nos. 70-S-34 to 100-S-34 and Nos. 61-S-47 to 91-S-47, inclusive, are built with grates extending full length of the boiler and using a mixing arch. All larger sizes are built as shown in catalog with bridge and wing walls.

†The Economy line of boilers does not require a header. Plug and bush tappings to size of mains.

‡Send for Catalog 1751-G for additional data.

INTERNATIONAL HEATER COMPANY



Steam Pattern

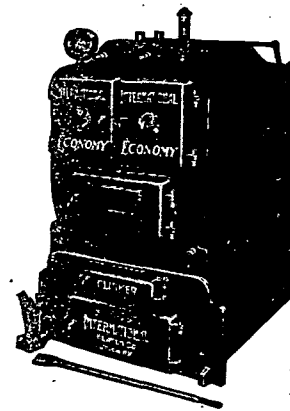
ECONOMY

SECTIONAL

BOILERS

Steam Pattern

Water Pattern



Water Pattern

Number	Guaranteed Radiation Load Sq. Ft.	Commercial Rating Sq. Ft.	Size of Grate Sq. Ft.	Additional Area Side Grates Sq. Ft.	Number	Guaranteed Radiation Load Sq. Ft.	Commercial Rating Sq. Ft.	Size of Grate Sq. Ft.	Additional Area Side Grates Sq. Ft.
4-S-19	427	915	3.1	2.1	19-W-4	705	1525	3.1	2.1
5-S-19	568	1220	4.2	2.5	19-W-5	937	2015	4.2	2.5
6-S-19	711	1525	5.2	2.9	19-W-6	1173	2500	5.2	2.9
4-S-22	497	1070	3.6	2.2	22-W-4	820	1760	3.6	2.2
5-S-22	667	1435	4.9	2.6	22-W-5	1100	2365	4.9	2.6
6-S-22	837	1800	6.1	3.0	22-W-6	1381	2970	6.1	3.0
7-S-22	1008	2165	7.3	3.3	22-W-7	1663	3570	7.3	3.3
5-S-28	852	1830	6.2	3.0	28-W-5	1405	3020	6.2	3.0
6-S-28	1079	2320	7.7	3.3	28-W-6	1780	3825	7.7	3.3
7-S-28	1306	2800	9.3	3.7	28-W-7	2155	4630	9.3	3.7
8-S-28	1533	3300	10.9	4.1	28-W-8	2529	5435	10.9	4.1
5-S-34	1137	2440	7.5	3.3	W-34-W-5	1876	4026	7.5	3.3
6-S-34	1421	3050	9.4	3.6	W-34-W-6	2345	5002	9.4	3.6
7-S-34	1705	3660	11.3	4.0	W-34-W-7	2813	5978	11.3	4.0
8-S-34	1989	4270	13.2	4.4	W-34-W-8	3282	7076	13.2	4.4
9-S-34	2274	4880	15.1	4.7	W-34-W-9	3752	8052	15.1	4.7
10-S-34	2558	5490	17.0	5.1	W-34-W-10	4221	9028	17.0	5.1
6-S-47	3180	6890	16.3	4.7	47-W-6	5247	11375	16.3	4.7
7-S-47	3780	8190	19.5	5.1	47-W-7	6237	13520	19.5	5.1
8-S-47	4380	9490	22.8	5.6	47-W-8	7227	15665	22.8	5.6
9-S-47	4980	10790	26.1	6.0	47-W-9	8217	17810	26.1	6.0
10-S-47	5580	12090	29.3	6.5	47-W-10	9207	19955	29.3	6.5

SERIES	19"	22"	28"	34"	47"
Height to Water Line.....	44"	47"	50"	54"	59"
Height to Supply Outlets.....	53"	57"	62 1/2"	68"	73"
Width of Boiler.....	9"	11"	11"	11"	12"
Add to height for Trimmings.....	27"	29 1/2"	35"	40 1/4"	53"
Width of Ashpit.....	35"	39"	45"	54"	63"
Height from Floor to Center of Return Tappings.....	18"	19"	19 1/2"	20"	21 1/2"
Height of Fire Box to Crown.....	22"	22"	24"	26"	26"
Height, Grate to Middle of Feed Door.....	16"	16"	18"	18"	18"
Size of Feed Door.....	9x14"	9x17"	9x17"	11x21"	2-10x17"
Diameter of Smoke Flue.....	9"	12"	14"	16"	20"

*Column No. 1 is our "Guaranteed Radiation Load" rating in direct cast iron radiation, as explained on preceding page.
Column No. 2 is our "Commercial" rating indicating our ratings based on tests made in accordance with the A. S. of H. & V. E. Code. This is for comparison with boiler ratings of other manufacturers who use this as their rating basis.